(ii)(A) For locomotives or locomotive engines not utilizing aftertreatment technology (e.g., catalyst). For HC, THCE, NMHC, CO, NO_X. and PM, additive deterioration factors shall be used; that is, a deterioration factor that when added to the low mileage emission rate equals the emission rate at the end of useful life. However, if the deterioration factor supplied by the manufacturer or remanufacturer is less than zero, it shall be zero for the purposes of this section.

(B) For locomotives or locomotive engines utilizing aftertreatment technology (e.g., catalyst). For HC, THCE, NMHC, CO, NO_X. and PM, Multiplicative deterioration factors shall be used; that is deterioration factors that when multiplied by the low mileage emission rate equal the emission rate at the end of useful life. However, if the deterioration factor supplied by the manufacturer or remanufacturer is less than one, it shall be one for the purposes of this paragraph (b).

(C) For all locomotives and locomotive engines. For smoke, additive deterioration factors shall be used. However, if the deterioration factor supplied by the manufacturer or remanufacturer is less than zero, it shall be zero for the purposes of this paragraph (b).

(iii) In the case of a multiplicative exhaust emission deterioration factor, the factor shall be rounded to three places to the right of the decimal point in accordance with ASTM E 29–93a (incorporated by reference at §92.5). In the case of an additive exhaust emission deterioration factor, the factor shall be established to a minimum of two places to the right of the decimal in accordance with ASTM E 29–93a (incorporated by reference at §92.5).

(iv) Every deterioration factor must be, in the Administrator's judgement, consistent with emissions increases observed in-use based on emission testing of similar locomotives or locomotive engines. Deterioration factors that predict emission increases over the useful life of a locomotive or locomotive engine that are significantly less than the emission increases over the useful life observed from in-use testing of similar locomotives or locomotive engines shall not be used.

§92.10 Warranty period.

Warranties imposed by §92.1107 shall apply for at least the first third of the full useful life of the locomotive or locomotive engine, or for the same period during which the manufacturer or remanufacturer provides any other mechanical warranty, whichever is longer. A copy of the manufacturer's or remanufacturer's warranty shall be submitted with the application for certification.

§92.11 Compliance with emission standards in extraordinary circumstances.

The provisions of this section are intended to address problems that could occur near the date on which more stringent emission standards become effective, such as the transition from the Tier 1 standards to the Tier 2 standards on January 1, 2005.

(a) In appropriate extreme and unusual circumstances which are clearly outside the control of the manufacturer and which could not have been avoided by the exercise of prudence, diligence, and due care, the Administrator may permit a manufacturer, for a brief period, to introduce into commerce locomotives which do not comply with the applicable emission standards if:

(1) The locomotives cannot reasonably be manufactured in such a manner that they would be able to comply with the applicable standards;

(2) The manufacture of the locomotives was substantially completed prior to the applicability date of the standards from which the manufacturer seeks relief;

(3) Manufacture of the locomotives was previously scheduled to be completed at such a point in time that locomotives would have been included in the previous model year, such that they would have been subject to less stringent standards, and that such schedule was feasible under normal conditions;

(4) The manufacturer demonstrates that the locomotives comply with the less stringent standards that applied to the previous model year's production described in paragraph (a)(3) of this section, as prescribed by subpart C of this part (i.e., that the locomotives are

identical to locomotives certified in the previous model year);

(5) The manufacturer exercised prudent planning and was not able to avoid the violation and has taken all reasonable steps to minimize the extent of the nonconformity; and

(6) The manufacturer receives approval from EPA prior to introducing the locomotives into commerce.

(b) Any manufacturer seeking relief under this section shall notify EPA as soon as it becomes aware of the extreme or unusual circumstances.

(c)(1) Locomotives for which the Administrator grants relief under this section shall be included in the engine family for which they were originally intended to be included.

(2) Where the locomotives are to be included in an engine family that was certified to an FEL above the applicable standard, the manufacturer shall reserve credits to cover the locomotives covered by this section, and shall include the required information for these locomotives in the end-of-year report required by subpart D of this part.

(d) In granting relief under this section, the Administrator may also set other conditions as he/she determines to be appropriate, such as requiring payment of fees to negate an economic gain that such relief would otherwise provide to the manufacturer.

§ 92.12 Interim provisions.

Notwithstanding other provisions of this part, the following provisions apply as specified to locomotives and locomotive engines subject to the provisions of this part:

(a) *Tier 0 standards.* In addition to the requirements of §92.8(a)(1)(i), the following new locomotives and new locomotive engines are subject to the Tier 0 emission standards of §92.8. The requirements of this paragraph do not apply to passenger locomotives. The requirements of this paragraph (a) provide manufacturers of freshly manufactured locomotives two options for compliance. The first option is to comply with the requirements of paragraphs (a) (1) and (2) of this section, which has the effect of requiring compliance with Tier 0 standards on average beginning on January 1, 2001 for all freshly manufactured and remanufactured locomotives originally manufactured on or after January 1, 1994. The second option requires compliance with the requirements of paragraph (a)(3) of this section that the manufacturer make a remanufacturing system available at a reasonable cost for its primary model for the 1994 through 1997 production period prior to January 1, 2000, and to apply the same emission controls to its new production of similar locomotives. Manufacturers complying with paragraph (a)(3) of this section would be allowed to manufacture and remanufacture other locomotives without a certificate of conformity, prior to January 1, 2002, except as required by paragraph (a)(2)(ii) of this section. Manufacturers may comply with paragraph (a)(3) of this section through compliance with the provisions of paragraph (a)(5) of this section.

(1) *Freshly manufactured locomotives.* Except as provided in paragraph (a)(3) of this section, all freshly manufactured locomotives manufactured on or after January 1, 2001 must comply with the emission standards listed in Table A8–1 of §92.8 and all other applicable requirements of this part.

(2) *Remanufactured locomotives.* The following locomotives (and engines used in the following locomotives) must comply with the emission standards listed in Table A8–1 of §92.8 and all other applicable requirements of this part:

(i) Locomotives originally manufactured on or after January 1, 1994, that are remanufactured on or after January 1, 2001; and

(ii) Locomotives originally manufactured on or after January 1, 1990 for which a remanufacturing system has been certified to Tier 0 standards and is available for use at reasonable cost.

(3) *New model exemption.* (i) Freshly manufactured locomotive models not introduced for widespread production prior to January 1, 1998 are exempt from the requirements of paragraph (a)(1) of this section provided the manufacturer of the locomotive:

(A) Has obtained a certificate of conformity and made available for use at reasonable cost before January 1, 2000, a remanufacturing system for its primary locomotive model (including its